

SM processes	e τ channel
	$M > 310\text{GeV}/c^2$
$Z/\gamma^* \rightarrow \tau\tau$	0.2 ± 0.03
$Z/\gamma^* \rightarrow ee$	0.04 ± 0.01
$W \rightarrow e\nu(+\text{jets})$	0.3 ± 0.05
$W \rightarrow \tau\nu(+\text{jets})$	0.002 ± 0.001
WW	0.01 ± 0.002
$t\bar{t}$	0.004 ± 0.001
Dijets and γ +jets	0.3 ± 0.06
Total SM background	$0.9 \pm 0.06 \pm 0.1$
Expected signal	$2.7 \pm 0.1 \pm 0.3$
Observed Events in data	2

TABLE 1. The expected signal ($M = 500\text{GeV}/c^2$) and SM background in e τ channel. The uncertainties on the individual background are statistic uncertainties. The uncertainties on the total SM background and expected signal are statistic and systematic uncertainties.